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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,865	04/10/2001	Mark T. Corl	2916-0128P	6950

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EXAMINER	
SALTARELLI, DOMINIC D	
ART UNIT	**PAPER NUMBER**
2611	

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/828,865	CORL, MARK T.	
	Examiner	Art Unit	
	Dominic D. Saltarelli	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,6,9 and 11-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,6,9 and 11-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 6, and 15-18 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 4, 6, 9, and 11-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arsenault et al. (6,658,661) in view of the Program Guide for Digital Television ATSC Standard A/55 [ATSC].

Regarding claims 1 and 13, Arsenault discloses a method to determine issuance intervals for a plurality of program guide tables to be transmitted in sequence, wherein the tables are assigned to cover different ranges of broadcasting time, and an issuance interval for a table is a person at which the corresponding table is issued, the method comprising setting the issuance intervals for the tables respectively, to be non-uniform based on the range of broadcasting time which each of the tables is assigned to cover, wherein the among the tables, the issuance interval for a table covering a range of

broadcasting time nearer a current time is set to be less than the issuance interval for a table covering a range of broadcasting time further in the future (fig. 5, col. 7, lines 23-67).

Arsenault fails to disclose the tables are event information tables (EITs).

In an analogous art, ATSC teaches a standard for transmitting program guide information wherein the programming information regarding program titles and start times are sent in a defined EIT format (pages 5 and 24-30).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Arsenault to include EITs, as taught by ATSC, for the benefit of conforming to the ATSC set standard for transmitting program guide information.

Regarding claims 4 and 9, Arsenault discloses a program and system information generator to generate tables for a digital television system packet stream (transmission station 14 shown in fig. 1 is the generator generating the stream shown in fig. 5), the generator comprising:

an interface to supply issuance-setting information required for setting issuance intervals respectively for a plurality of tables to be transmitted in sequence (the means that determines the timing of the carousels shown in fig. 5, col. 7, lines 23-30); and

a non-uniform interval determination unit to determine non-uniform issuance intervals respectively for the tables based upon the issuance-setting

information (the means that actually sets the timing information disclosed in col. 7, lines 43-49 for creating the stream shown in fig. 5),

wherein among the tables, an issuance interval between any two adjacent instances of an i^{th} table (table 0, in the example given, is 0-6 hours of programming from the current time, and table 1 is 6-24 hours of programming from the current time) is determined according to the following equation:

interval(i^{th} table) = root_time + (increment_time)*i,

wherein interval(i^{th} table) is the interval between any two adjacent instances of the i^{th} table, root_time is a predetermined interval for the table corresponding most closely in time to the present, increment_time is a non-zero scalar and i is a non-zero integer (as shown in col. 7, lines 40-49, between the 0 and 1 tables, wherein i = 1, the interval for table 1 is 30 minutes and the root_time is 5 minutes, which is the interval for table 0, making the increment_time the non-zero scalar 25, thus satisfying the above equation because 30 = 5 + 25*1).

Arsenault fails to disclose the generator operates according to PSIP and the tables are event information tables (EITs).

In an analogous art, ATSC teaches a standard for transmitting program guide information wherein the programming information regarding program titles and start times are sent in a defined EIT format (pages 5 and 24-30).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Arsenault to include EITs, as taught by

ATSC (the PSIP standard), for the benefit of conforming to the ATSC set standard for transmitting program guide information.

Regarding claims 6, 11, and 14, Arsenault discloses a program and system information generator to generate tables for a digital television system packet stream (transmission station 14 shown in fig. 1 is the generator generating the stream shown in fig. 5), the generator comprising:

an interface to supply issuance-interval information required for setting issuance intervals respectively for a plurality of tables to be transmitted in sequence (the means that determines the timing of the carousels shown in fig. 5, col. 7, lines 23-30), wherein an issuance interval for a table is a period at which the correspond table is issued, and the issuance-interval setting information is an assignment of each of the tables to cover one of different ranges of broadcasting time (col. 7, lines 43-49); and

a non-uniform interval determination unit to determine non-uniform issuance intervals respectively for the tables based upon the issuance-interval setting information (the means that actually sets the timing information disclosed in col. 7, lines 43-49 for creating the stream shown in fig. 5),

wherein among the tables, the issuance interval for a table covering a range of broadcasting time nearer a current time is set to be less than the issuance interval for a table covering a range of broadcasting time further in the future (col. 7, lines 23-67).

Arsenault fails to disclose the generator operates according to PSIP and the tables are event information tables (EITs).

In an analogous art, ATSC teaches a standard for transmitting program guide information wherein the programming information regarding program titles and start times are sent in a defined EIT format (pages 5 and 24-30).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Arsenault to include EITs, as taught by ATSC (the PSIP standard), for the benefit of conforming to the ATSC set standard for transmitting program guide information.

Regarding claim 11, Arsenault and ATSC disclose the generator of claim 6, wherein said PSIP generator is embodied in the form of a processor running software (the generator is a digital computer system for receiving, generating, multiplexing, and broadcasting digital data streams, including the electronic program guide data, col. 5, lines 19-41).

Regarding claim 12, Arsenault and ATSC disclose the generator of claim 11, but fail to disclose said software is writing in the computer language Java.

The official notice take that using the computer language Java is notoriously well known in the art, as the Java language has the advantages of being a portable, cross-platform, object oriented software language, was not traversed by the applicant, and is thus taken as an admission of the facts therein.

Therefore, it would have been obvious at the time to a person of ordinary skill in the art to modify the generator of Arsenault and ATSC to include said software is written in the computer language java, for the benefits of using a software language that is object oriented, portable, and platform independent, which simplifies the design and implementation of said software.

Regarding claims 15 and 17, Arsenault and ATSC disclose the method and generator of claims 1 and 6, wherein the EITs include EIT-0, EIT-1, and EIT-2 (as shown in fig. 4.1 in ATSC, wherein the program guide information transmitted includes all EITs 1 though N).

Regarding claims 16 and 18, Arsenault and ATSC disclose the method and generator of claims 15 and 17, wherein the issuance intervals are set respectively for EIT-0, EIT-1, and EIT-2 to increase as the EIT table number increases (Arsenault, col. 7, lines 55-59).

Regarding claims 19-27, Arsenault discloses a method and program and system information generator (transmission station 14 shown in fig. 1 is the generator generating the stream shown in fig. 5) for determining transmission cycles of a group of tables (fig. 5), the method comprising:

setting the transmission cycles of the groups of tables to be non-uniforms with respect to each other, based on closeness in coverage time to which each

table in the group is assigned, to a current broadcasting time, wherein among the group of tables, the transmission cycle of a table assigned to a coverage time nearer the current time is set to be less than the transmission cycle of a table assigned to a coverage time further in the future from the current broadcasting time (col. 7, lines 23-67).

Arsenault fails to disclose the tables are event information tables (EITs) including EIT-0, EIT-1, and EIT-2.

In an analogous art, ATSC teaches a standard for transmitting program guide information wherein the programming information regarding program titles and start times are sent in a defined EIT format (pages 5 and 24-30), including EIT-0, EIT-1, and EIT-2 (as shown in fig. 4.1 in ATSC, wherein the program guide information transmitted includes all EITs 1 though N).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Arsenault to include EITs, as taught by ATSC, for the benefit of conforming to the ATSC set standard for transmitting program guide information.

Regarding claims 20, Arsenault and ATSC disclose the method of claim 19, wherein the issuance intervals are set respectively for EIT-0, EIT-1, and EIT-2 to increase as the EIT table number increases (Arsenault, col. 7, lines 55-59).

Conclusion

4. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D. Saltarelli whose telephone number is (571) 272-7302. The examiner can normally be reached on Monday - Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dominic Saltarelli
Patent Examiner
Art Unit 2611

DS

HAI TRAN
PRIMARY EXAMINER